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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/043,406	03/18/98	O'BRIEN	P 36-1148

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EXAMINER	
MORGAN, G	
ART UNIT	**PAPER NUMBER**
2761	11

DATE MAILED: 05/10/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/043,406	O'Brien et al.
Examiner	**Group Art Unit**
George Morgan	2761

☒ Responsive to communication(s) filed on *Feb 29, 2000*

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-27* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☒ Claim(s) *11-14 and 16-20* is/are allowed.

☒ Claim(s) *1-3, 7-9, 21-24, and 26* is/are rejected.

☒ Claim(s) *4-6, 10, 15, 25, and 27* is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on *Feb 29, 2000* is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *4*

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

Status of Claims

1. Claims 1-27 were under prosecution in this application at the time of the prior, August 31, 1999 Office action. Applicant has amended claims 1-27, and has not added or canceled claims. Therefore, claims 1-27 are under prosecution in this application.

Summary of this Office Action

2. Applicant's remarks filed February 29, 2000 have been fully considered, are discussed in the next section below or within the following rejections under 35 U.S.C § 112 and 35 U.S.C § 103, and are not deemed to be entirely persuasive. Claims 1-3, 7-9, 21-24, and 26 are rejected; claims 11-14 and 16-20 are allowable; and claims 4-6, 10, 15, 25, and 27 are objected to as being dependent upon a rejected base claim. Applicant's request for allowance is respectfully denied.

Response to Applicant's Amendment

3. Examiner acknowledges applicant's amendment to claims 11-17 overcoming the rejection under 35 U.S.C § 101. Accordingly, the rejection under 35 U.S.C § 101 is withdrawn.

4. Examiner acknowledges applicant's amendment to claims 1, 11, 12, 19, 24, and 25 overcoming the rejection under 35 U.S.C § 112. Accordingly, the rejection under 35 U.S.C § 112 is withdrawn.

5. Applicant attempts to distinguish over McAtee by saying that his invention is based on service level agreements (SLA's) whereas the work flow system of McAtee shows a limited type of workflow control. Examiner finds this line of reasoning persuasive only with regard to claims

4 through 6, 10, 11 through 20, 25, and 27. As regards the remaining claims, not enough of the structure of a SLA is claimed. The invention claimed in claim 21 actually reads on McAtee. As was pointed out in the prior Office action, claims 1-3, 7-9, 22-24, and 26 are obvious over McAtee in view of Wong.

6. Applicant is advised that during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 162 USPQ 541, 550 - 51 (CCPA 1969). While the meaning of claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. *In re Zletz*, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). One must bear in mind that the words in a claim are generally not limited in their meaning by what is shown or disclosed in the specification. It is only when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language. *In re Vogel*, 164 USPQ 619, 622 (CCPA 1970). There is one exception and that is when an element is claimed using language falling under the scope of 35 U.S.C. 112, 6th paragraph (often broadly referred to as means or step plus function language). In that case, the specification must be

consulted to determine the structure, material, or acts corresponding to the function recited in the claim. *In re Donaldson* , 29 USPQ2d 1845 (Fed. Cir. 1994)(see MPEP § 2181 - § 2186).

7. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Drawings

9. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. As per Claim 21, line 9, the phraseology "the nature of said response" is indefinite and confusing.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by McAtee et al., U.S. Patent No. 5,301,320.

As per Claim 21, *McAtee et al.* disclose a method of business process enactment, said method being implemented in a distributed computing environment [Fig. 4] including at least one service provider and at least one service requester [Fig. 2 (shows orders received from a service requester being processed by a service provider)], said method comprising: receiving a request at a service provider from any service requester within said environment [Fig. 2; a customer uses a data entry program (as mentioned at col. 7, lines 17-19) operated on a computer to input a service request into the system], outputting from said service provider a response to said service requester [*Id.* A reasonable inference would be that the user would receive responses from the system via the data entry computer as to the status of the order] by processing said request to determine the nature of said response [Fig. 2 ("Process Order")], accessing an up-datable data store storing parameters indicative of the present capacity of the service provider to provide the service, and [Fig. 2 ("Determine Whether Goods in Inventory")], controlling one or more resources in the environment available for use by said service provider, [Fig. 2, ref. no. 22 ("Print Invoice") implying that the system comprises a printer output means], wherein the processing determines the nature of said response on the basis of the data stored in the data store [col. 7, lines 17-19 (data entry updates the data store with information entered by the service requester, the order is processed based on the nature of this information)].

Claim Rejections - 35 USC § 103

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 1-3, 7-9, 22-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAtee et al., U.S. Patent No. 5,301,320, in view of *Preference-Based Decision Making for Cooperative Knowledge-Based Systems* (Wong; ACM Transactions on Information Systems).

As per Claim 1, *McAtee et al.* disclose a service provisioning system for use in providing services in a distributed processing environment, said system comprising:

an input connected to a distributed processing environment for receiving a service request from an entity [Fig. 2; a customer uses a data entry program (as mentioned at col. 7, lines 17-19) operated on a computer to input a service request into the system];

a response output connected to said distributed processing environment for providing a response to the entity [*Id.* A reasonable inference would be that the user would receive responses from the system via the data entry computer as to the status of the order];

processing means to process the service request and provide a response thereto [Fig. 2 ("Process Order")]; and

means to access an updatable data store for storing parameter(s) indicative of the available capacity of the system to provide the service [Fig. 2 ("Determine Whether Goods in Inventory")];

wherein the processing means is adapted to decide, based at least in part on data held in the data store, whether to provide a service or to decline to provide a service [the goods would be sent based on availability, as per the inventory level].

McAtee et al. does not disclose that the processing means is adapted to propose conditions under which the system is willing to provide a service.

Wong teaches processing means adapted to propose conditions under which a system is willing to provide a service [page 414, Section 2.3 (negotiation and compromise) E.g., the solution could be to provide the customer with a "rain check" or offer substitute merchandise or services)]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the flexible decision making of *Wong* into the service provisioning system of *McAtee et al.* The motivation would have been to increase customer satisfaction.

As per Claim 2, *McAtee et al.* disclose means for scheduling tasks/resources to provide a service [col. 5, lines 24-42 (workflow)].

As per Claim 3, *McAtee et al.* disclose means for scheduling a component service to provide a requested service [col. 5, lines 24-42 (goal)].

As per Claim 7, *McAtee et al.* disclose a system according to claim 1, comprising a control output connected by said distributed processing environment to one or more tasks and/or resources required to provide the service [Fig. 3].

As per Claim 8, *McAtee et al.* disclose a system according to claim 7, wherein the processing means is adapted to receive ~~data from the tasks~~ and/or resource(s) for use in updating the data store [Table 2].

As per Claim 9, *McAtee et al.* disclose a system according to claim 8, wherein said data includes task/resource performance and/or task/resource status data [Table 2 (task status)].

As per Claim 22, *McAtee et al.* disclose that in the event a service provider and service requester agree a contract to provide and accept a service respectively, a copy of the contract is stored as a data structure representing the terms and conditions of the contract by both the service provider and the service requester [Fig. 2 ("Print Invoice") The invoice is seen as a contract between the parties].

As per Claim 23, *McAtee et al.* disclose a service provision system for use in distributed processing environments, said system comprising;

service request processing means for identifying component processes for use in provisioning the requested service [Fig. 5];

an up-datable data store [Fig. 2];

means to access said up-datable data store for storing said conditions when established [col. 6, lines 7-45 (e.g., conditions include trigger conditions and time qualifiers)]; and

an output for providing a response to the service request, said response comprising an indication of availability of the requested service [Fig. 2 ("Determine Whether Goods in Inventory")];

wherein the processing means is adapted to process a service request by accessing one or more of the previously established conditions in the data store, processing the request using the one or more established conditions, and producing said response [The order will be processed if the item is in inventory].

McAtee et al. does not disclose negotiation means for use in establishing conditions applicable to provision of those component processes.

Wong teaches negotiation means for use in establishing conditions applicable to provision of those component processes [page 414, Section 2.3 (negotiation and compromise) E.g., the solution could be to provide the customer with a "rain check" or offer substitute merchandise or services)]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the flexible decision making of *Wong* into the service provisioning system of *McAtee et al.* The motivation would have been to increase customer satisfaction.

As per Claim 24, *McAtee et al.* disclose that one or more of said established conditions has an associated expiry time for storage in the data store [col. 6, lines 42-45].

As per Claim 26, *McAtee et al.* discloses initiation means to initiate one or more component processes in provision of a requested service [Fig. 3].

Allowable Subject Matter

18. Claims 11-14 and 16-20 are allowable.

19. Claims 4-6, 10, 15, 25, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

References Cited

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Sisley et al. (5,467,268 and 5,737,728) disclose a method for resource assignment and scheduling.

Randell (5,745,687) disclose a system for distributed workflow in which a routing node selects the next node to be performed within a workflow procedure.

Lagarde et al. (5,745,754) disclose a sub-agent for fulfilling requests of a Web browser using an intelligent.

Toda (5,742,776) discloses a decision support system that collects and analyzes information on which a decision is to be made, and presents a plurality of alternative decisions.

Software Agents Prepare to Sift the Riches of Cyberspace (Science) discloses the uses and benefits of the software agent paradigm.

Enabling Agents to Work Together (Guha et al; Communications of the ACM) discloses how intelligent agents operate to share knowledge.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Morgan whose telephone number is (703) 306-2906. The examiner can normally be reached on Monday to Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Voeltz, can be reached on (703) 305-9714. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-0040.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

April 26, 2000

George D. Morgan

GM

Gail Hayes

GAIL O. HAYES
SUPERVISORY PATENT EXAMINER
GROUP 2700